Marine Spatial Planning for Washington's Pacific Coast

Olympic Coast National Marine Sanctuary Advisory Council
November 4, 2016

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Presentation Overview

- Plan overview
- How the plan informs decision-making
- Plan requirements
- Plan outline
- Part 2: Better Baseline Information
- Part 3: Spatial Analysis
- Part 4: Management Framework
- Policy and Spatial Recommendations
- Next Steps

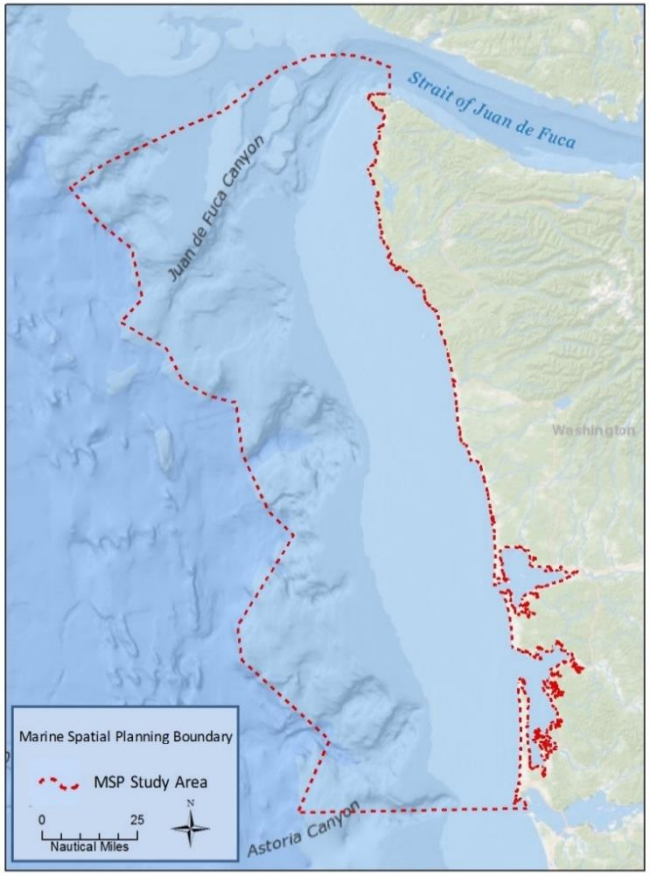
Marine Spatial Planning for Washington's Pacific Coast

Address potential new uses.

Plan goals/objectives:

- Protect existing uses
- Protect cultural uses/resources
- Preserve environment
- Integrate decision-making
- Provide new economic opportunities

Non-Regulatory Plan

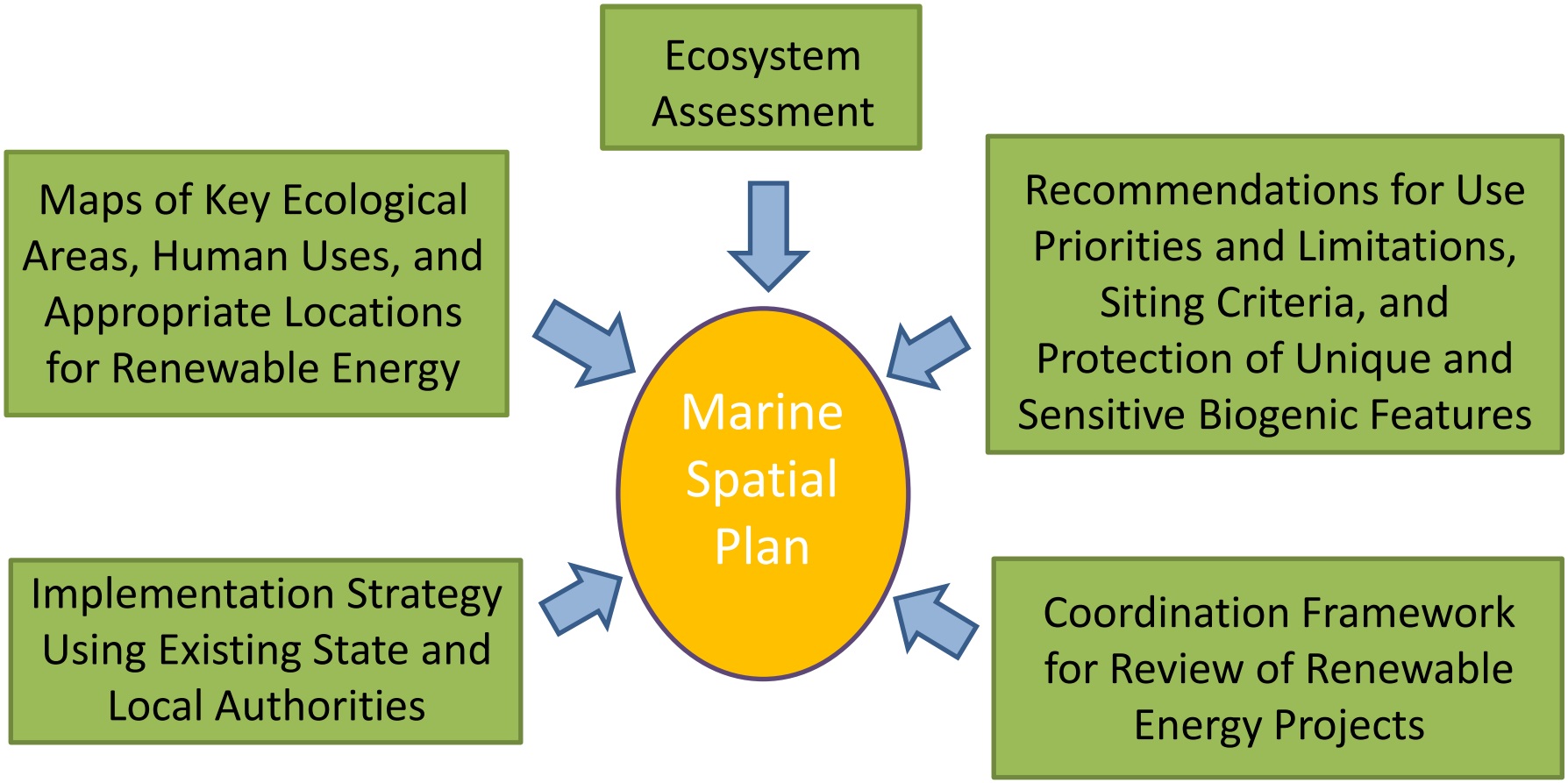


Study area is 700 fathoms offshore: includes state and federal waters and estuaries.

How the plan informs decision-making

- Better baseline information
- Ecosystem indicators to assess changes
- Analyses to support decision-making
- Recommendations for new uses
- Implementation framework across agencies

Plan Requirements



RCW 43.372.040(6)

Plan Outline

Part 1	• Background and Purpose
Part 2	• Context Chapters (Current and Potential Uses)
Part 3	• Ecological & Use Analyses
Part 4	• Management Framework (Recommendations)
Part 5	• SEPA (separate document, likely)

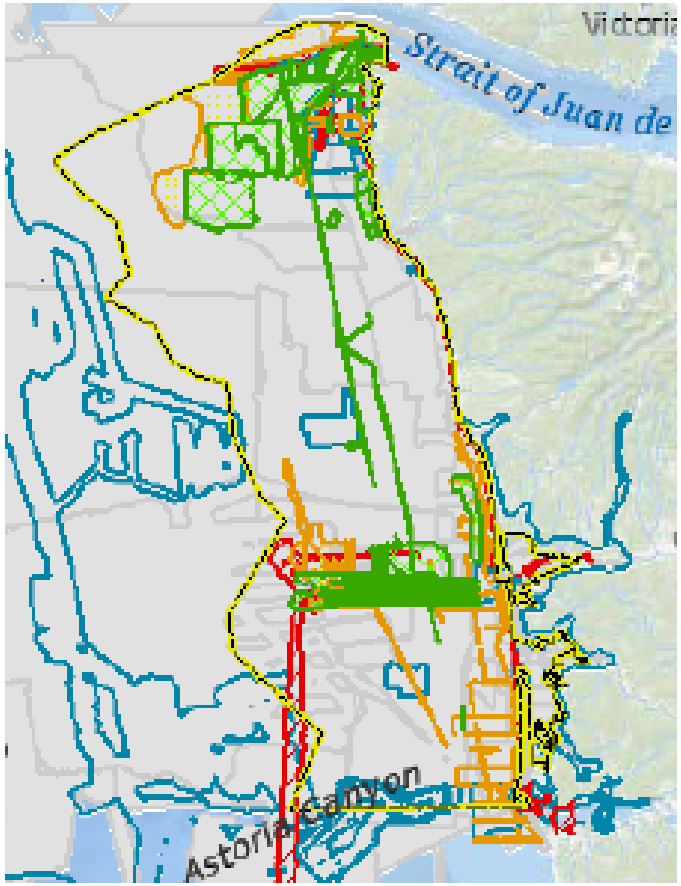
Part 2: Better Baseline Information

- Socio-Economics
- Archaeological and Historic Resources
- Ecology
- Current Ocean Uses
- Potential New Uses

Includes context and maps



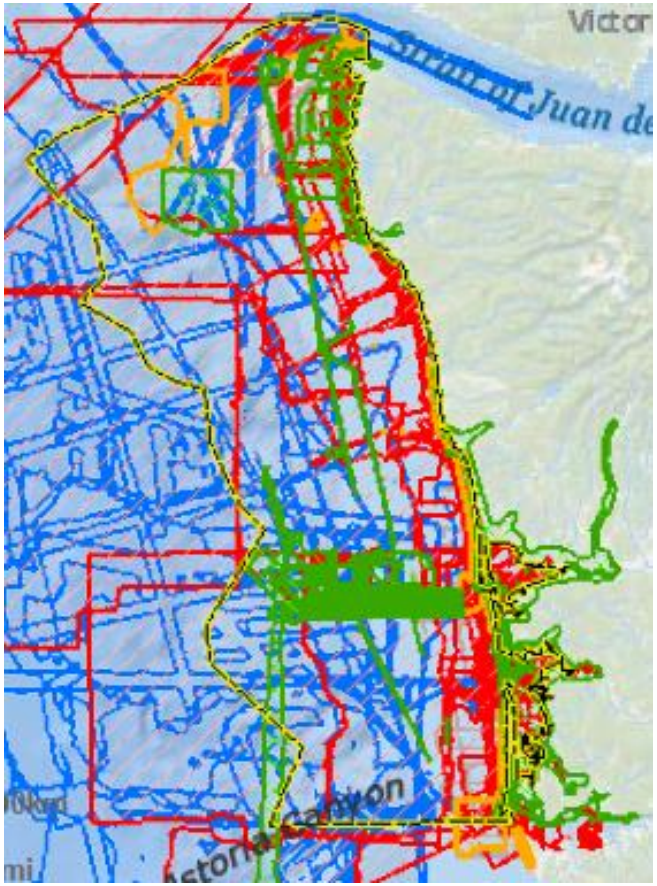

Seafloor Mapping Inventory & Prioritization



Intensity Quality

Data Quality:

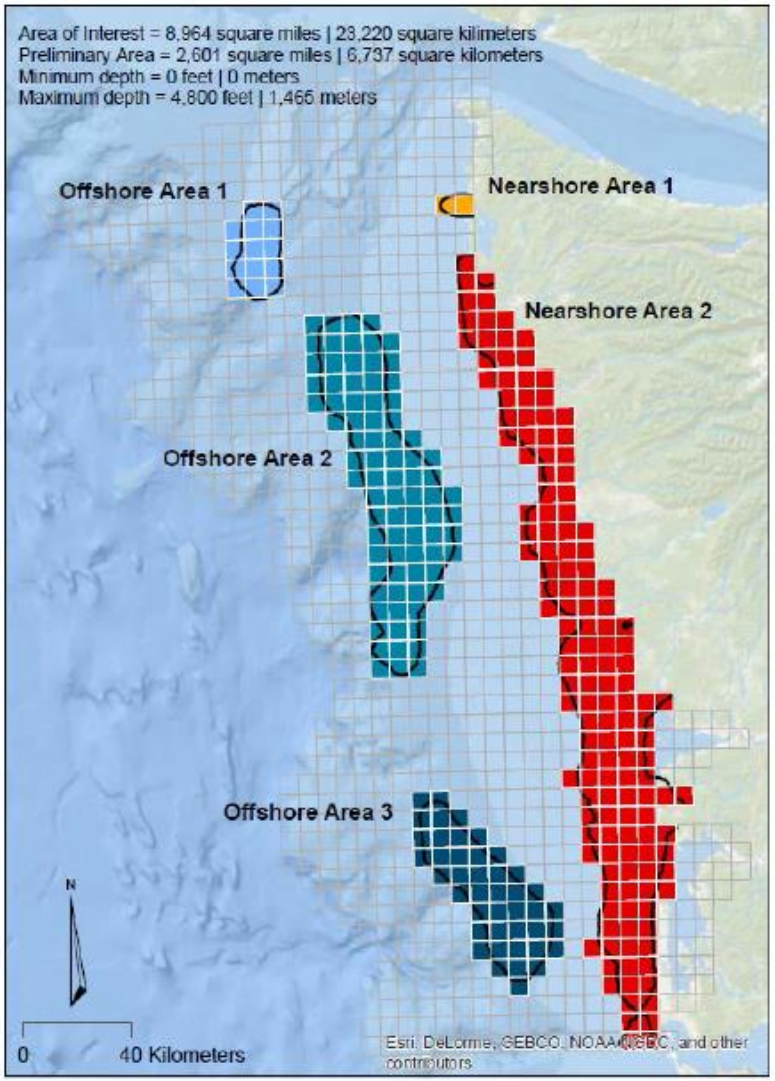
- High
- Medium
- Low
- None
- Unknown



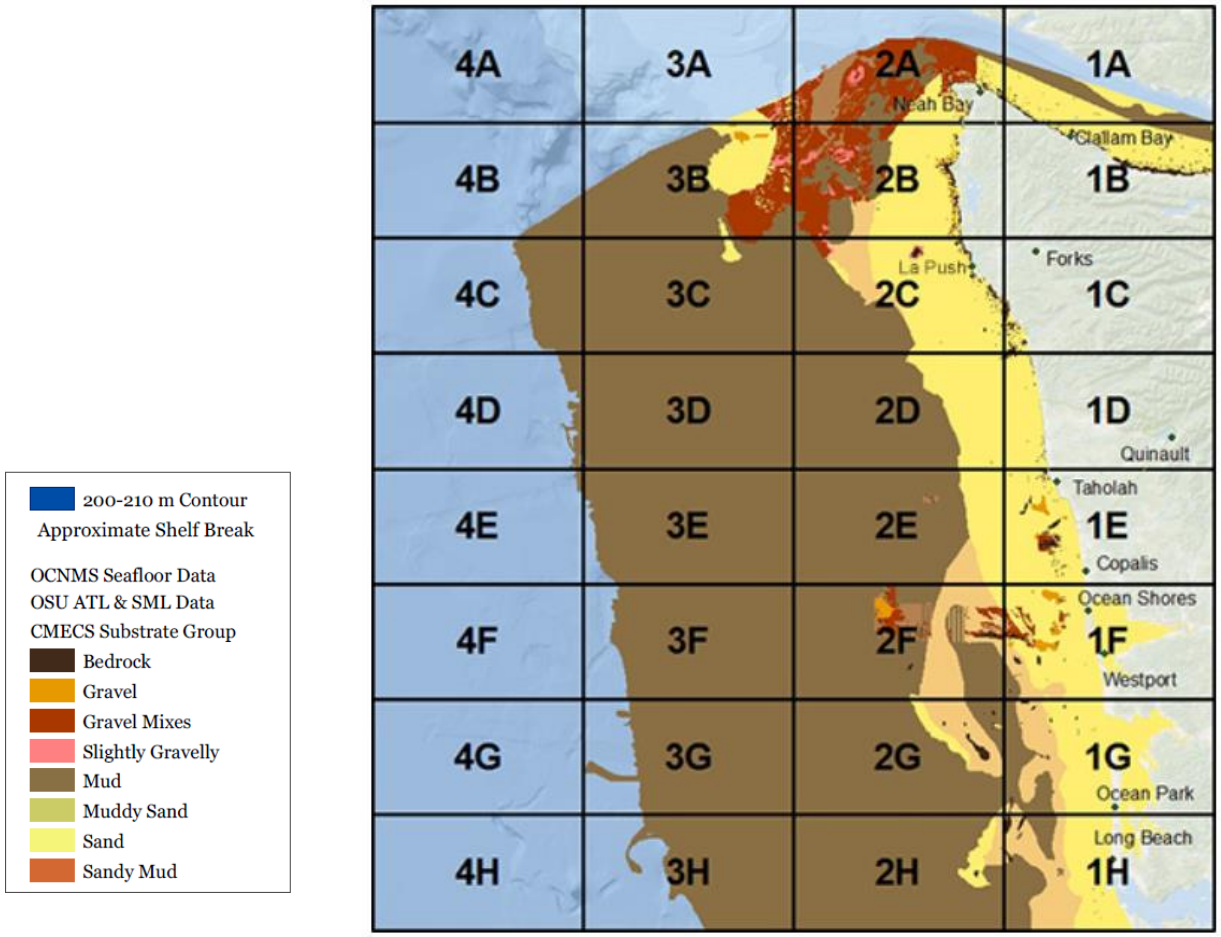
Elevation Quality

Seafloor Mapping: Shared Priorities

Figure 13: Preliminary priority mapping areas identified through cumulative hotspot analysis.

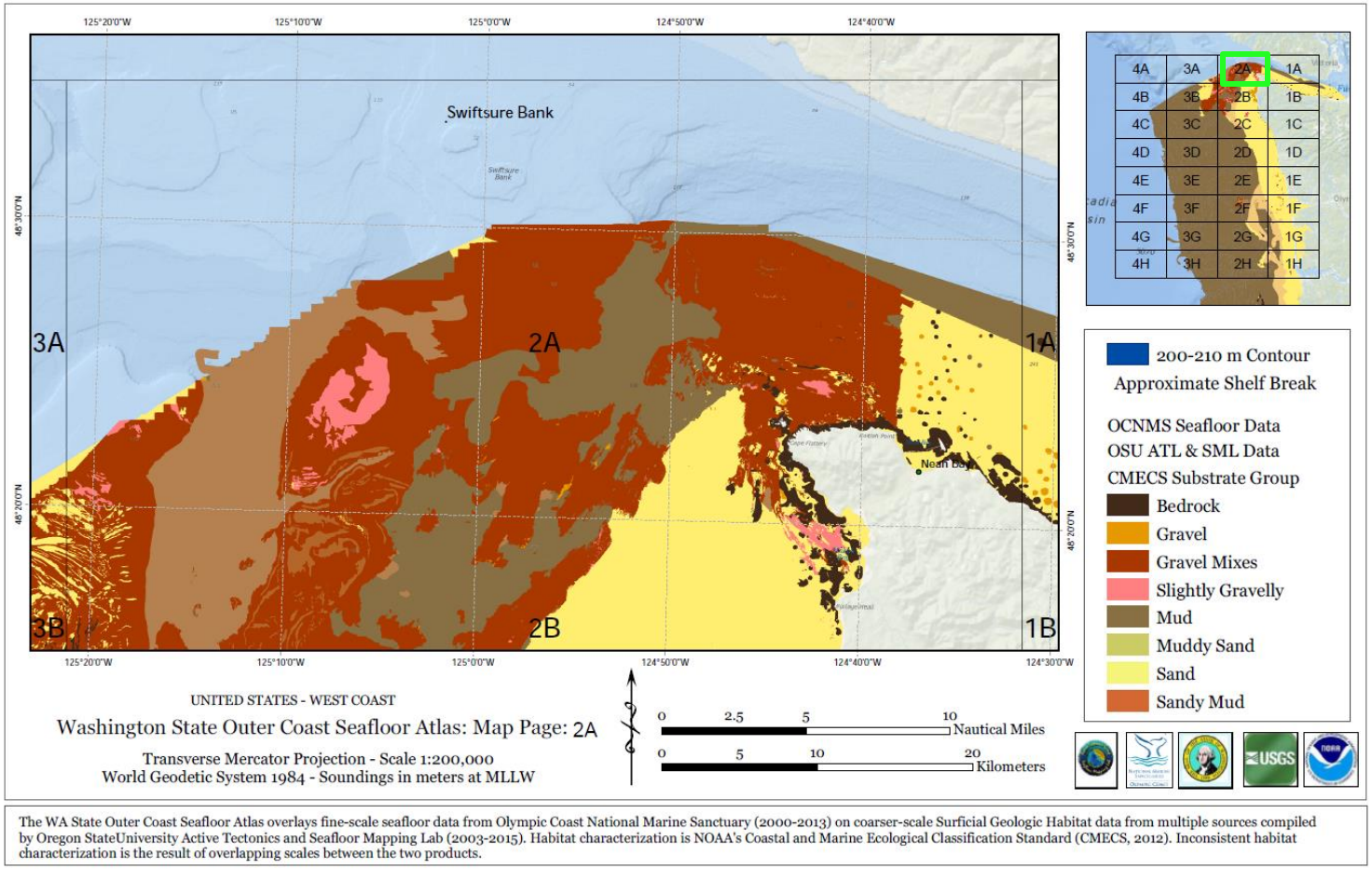


Seafloor Atlas



Available at:
http://olympiccoast.noaa.gov/science/habitatmapping/habitatmapping.html

Seafloor Atlas



The WA State Outer Coast Seafloor Atlas overlays fine-scale seafloor data from Olympic Coast National Marine Sanctuary (2000-2013) on coarser-scale Surficial Geologic Habitat data from multiple sources compiled by Oregon StateUniversity Active Tectonics and Seafloor Mapping Lab (2003-2015). Habitat characterization is NOAA's Coastal and Marine Ecological Classification Standard (CMECS, 2012). Inconsistent habitat characterization is the result of overlapping scales between the two products.

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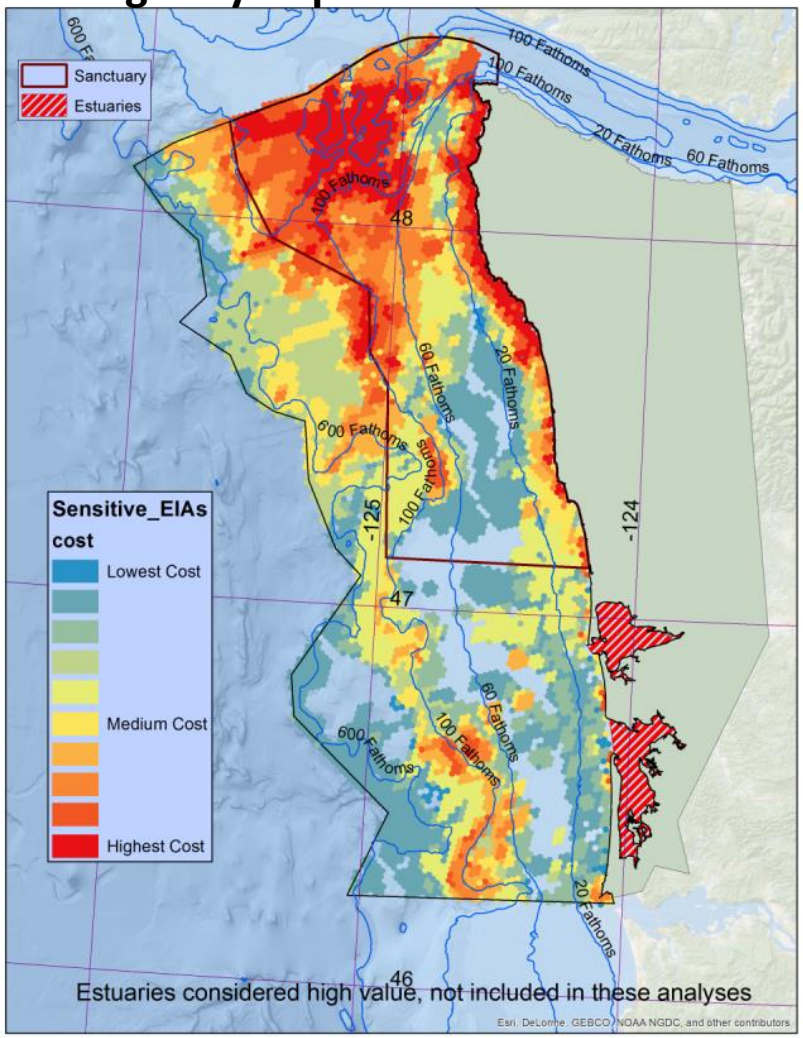
Part 3: Spatial Analyses

Included habitats, fish, seabirds, marine mammals, and habitats that are particularly sensitive.

Includes endangered or threatened species or overfished species (yelloweye rockfish)

Also have a map with EIA hotspots. Looks at high importance across all data sets.

Ecologically Important Areas: Sensitive



Use Analysis: Inputs

Existing Uses and Ecologically Important Areas Input Map

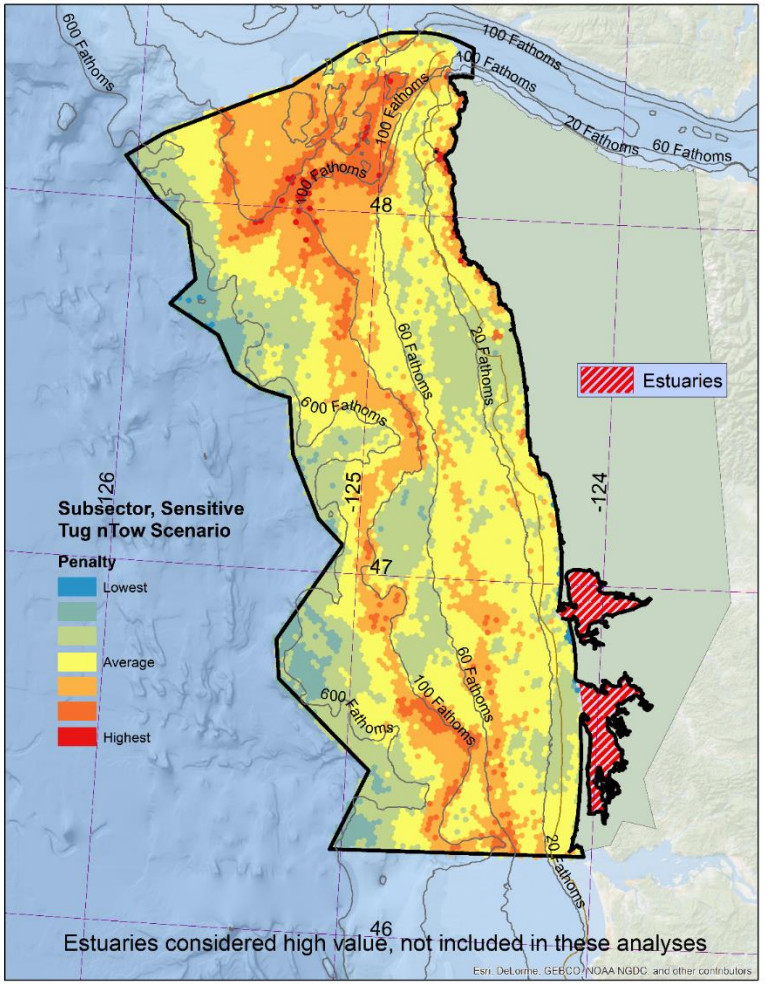
- Sensitive species, habitats, archaeological/historic sites
  - Crab adjusted for sandy-bottoms

- All other use sectors:
  - Fishing
  - Aquaculture
  - Ecologically Important Areas
  - Recreation
  - Transportation
  - Tug/Tow

- All values included (High, Medium and Low intensities)

- Weighted proportional to their intensity/use score

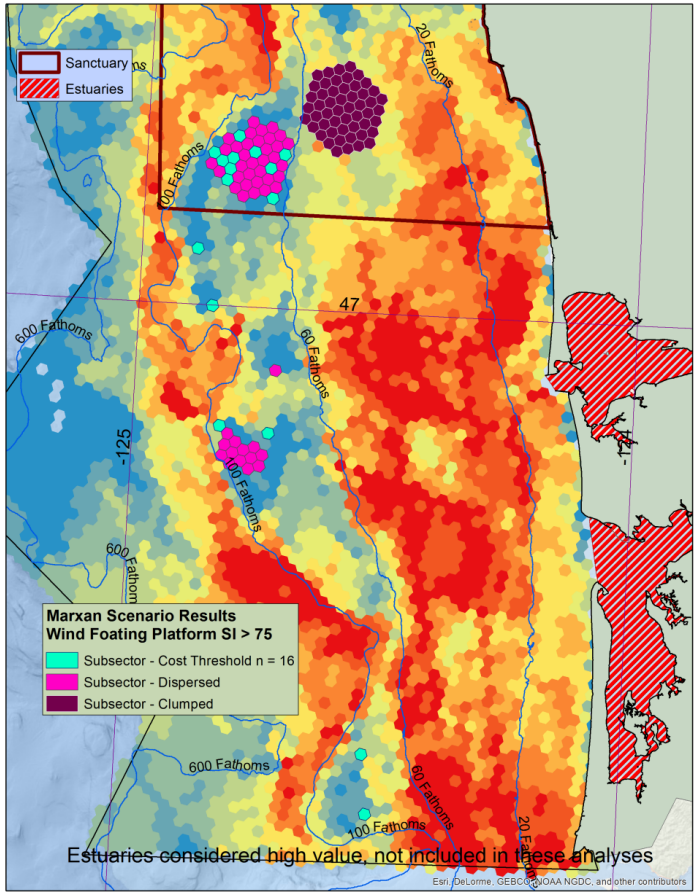
Existing Uses and Ecologically Important Areas: Penalty Input Map



Use Analysis

- Compared renewable energy potential with available, mapped information on uses and ecologically important areas.
- Structured to find areas for renewable energy at various scales and for different energy types and technologies.
- Various outputs: Clumped, dispersed, cost-threshold, and frequency selected

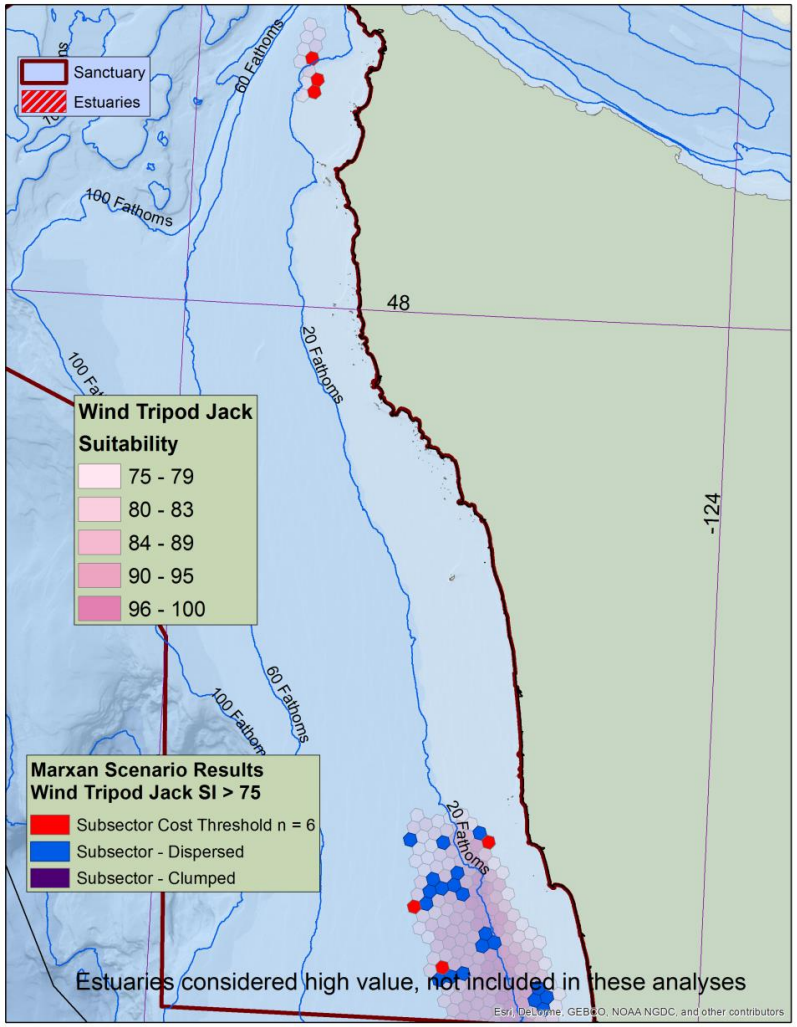
Floating Wind Platform Example



Use Analysis

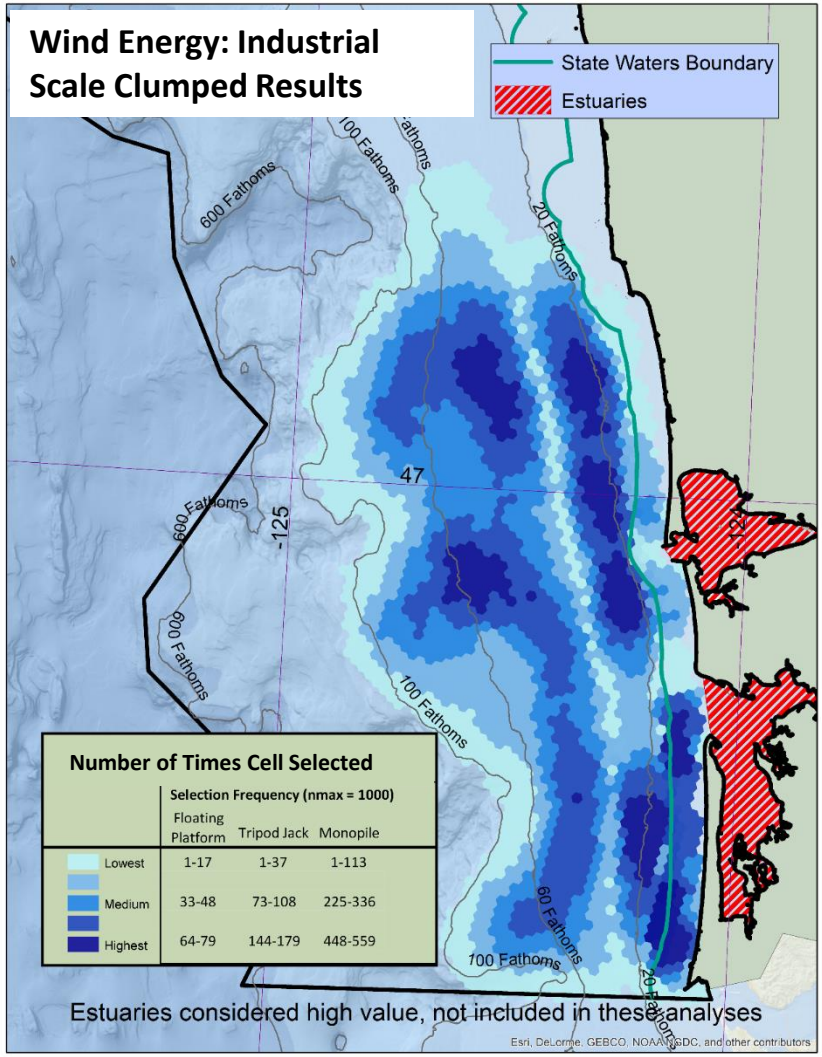
- “Cost threshold” limits total number of cells selected for lowest score – doesn’t try to achieve a certain size.
- “Dispersed” selects cells regardless of adjacency.
- “Clumped” results favor cells based on adjacency to each other.

Tripod Jack Wind Example



Wind Energy: “Industrial Scale”

- Includes all three technology types:
  - Monopile
  - Jacket-mounted
  - Floating
- 300-400 MW scale = approximately 50 square miles.



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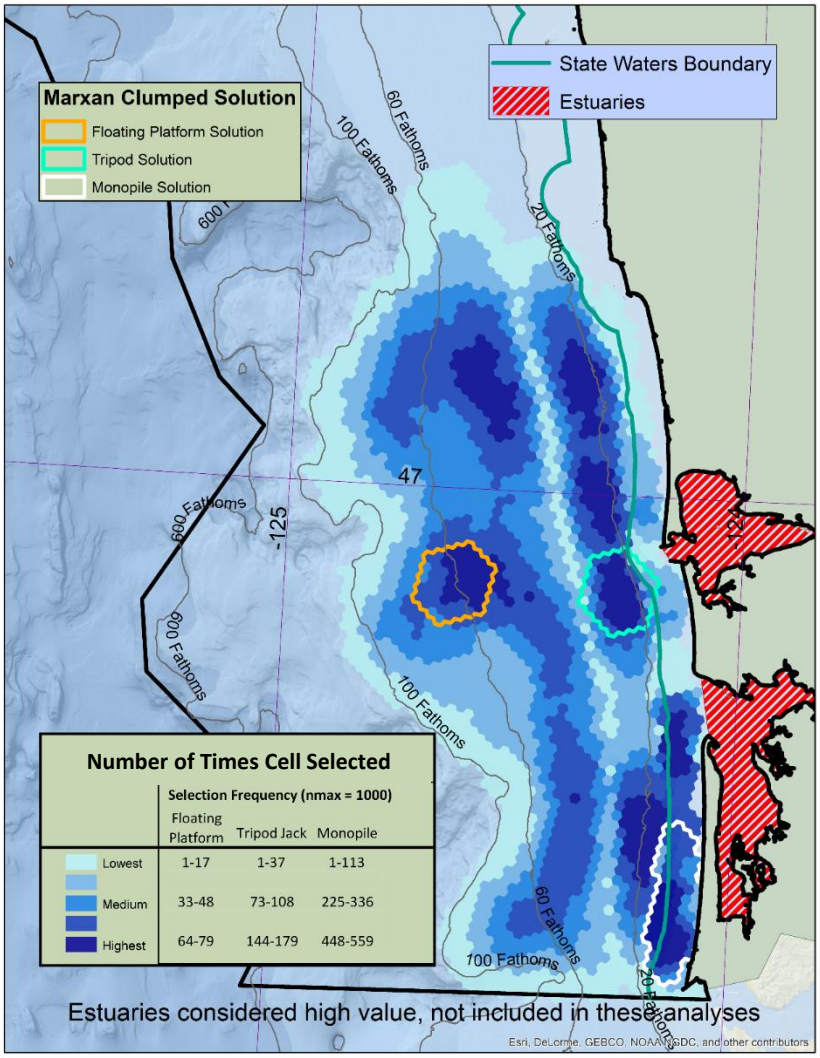
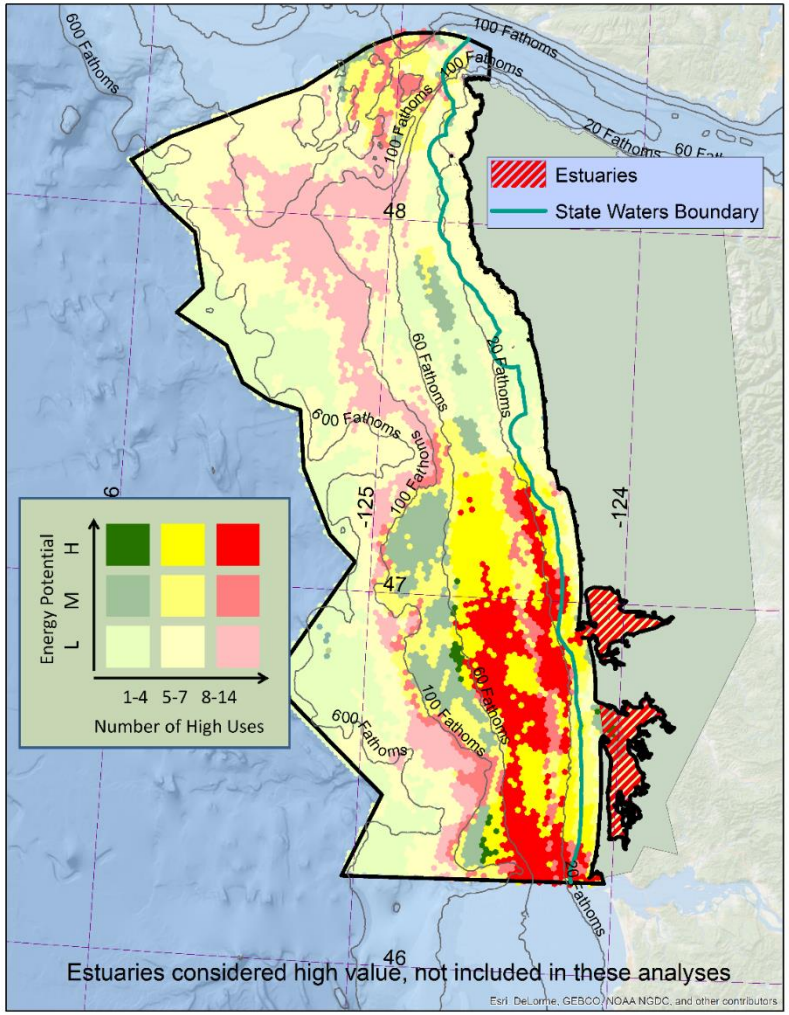


Energy Potential (wind) and High Uses/Ecological Hotspots

Comparison of Wind Energy Potential and Existing High Uses/Ecological Hotspots



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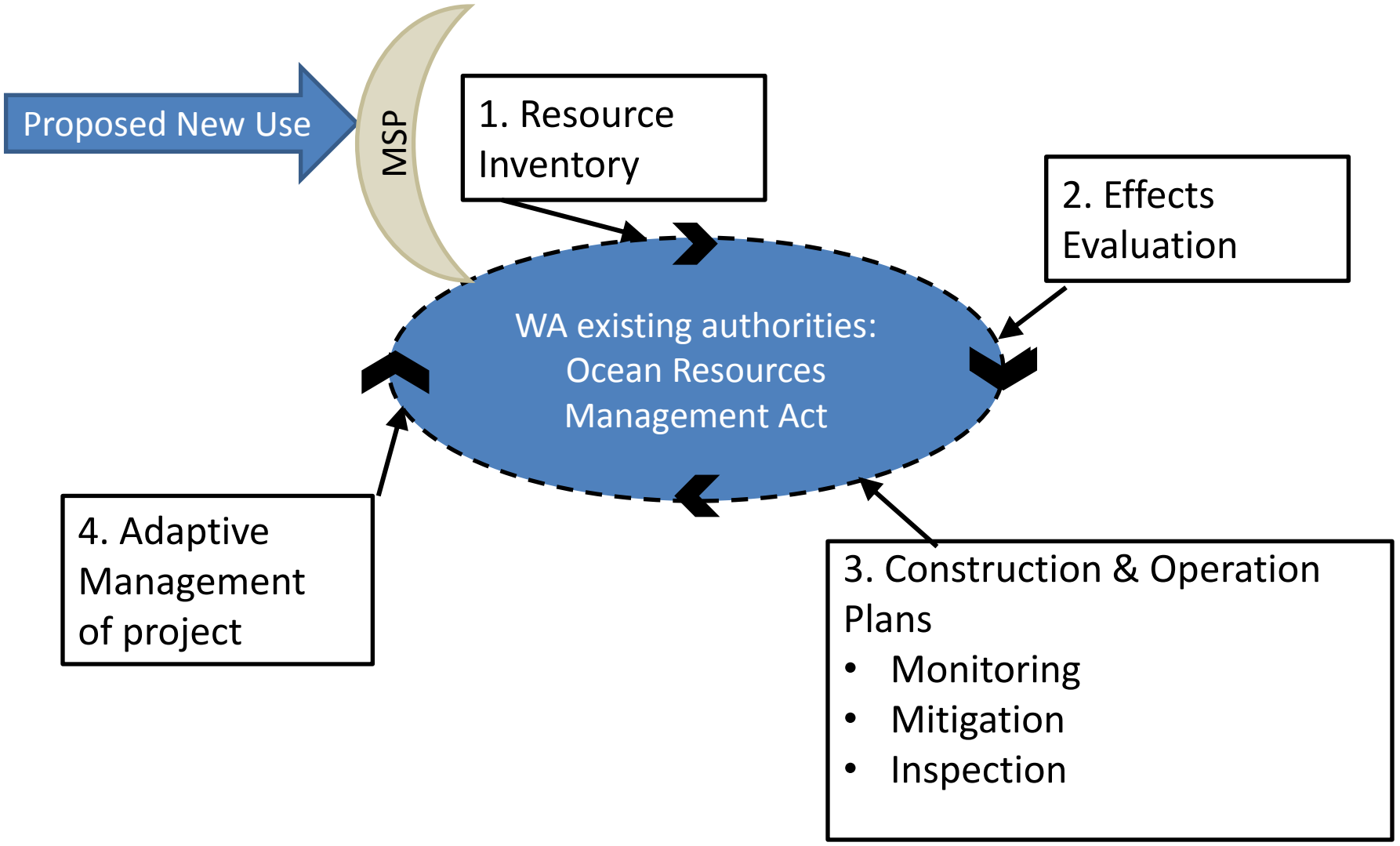
A Plan and A Process



Advisory Council Recommendations

- Policy recommendations, *June 2016*:
  - Economic
  - Social
  - Ecological
  - Process

- Other recommendations, *In Progress*

Potential Components of Spatial Recommendations

- Limitations and Background
- Important, Sensitive, and Unique areas (ISUs)
- Spatial recommendations: Renewable Energy, Existing Uses and Ecological Areas
- Other Uses

Potential Spatial Recommendations

- Recommend no industrial-scale projects in state waters to minimize impacts to existing uses and resources.
  - Industrial scale – energy at scale for regional grid (larger production/more devices).
  - Community scale – energy at scale for local community/communities (smaller production/fewer devices) and with support of local community.

Potential spatial recommendations

In state waters:

- Recommend renewable energy projects avoid areas that are highly used by lots of existing uses (including ecologically important areas). These areas would be very difficult to permit.

- Recommend further evaluation of proposed projects in areas that have moderate or lower level of use by existing uses on a case-by-case basis.

Next Steps

- Complete research, drafting and recommendations
  - WCMAC recommendations
  - Tribal input
- Preliminary plan (Late Winter)
- Draft plan and draft EIS (Spring 2017)
  - Public comment period
- Final plan adopted (June 2017)

Questions?

www.msp.wa.gov

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